

CLAIM AMENDMENT

Please amend the claims as set forth below.

- 1.-9. (Cancelled)
10. (Currently amended) A process for producing a fertile transgenic *Zea mays* plant comprising the steps of (i) bombarding intact regenerable *Zea mays* cells with DNA-coated microprojectiles; wherein said DNA comprises a preselected DNA sequence encoding a *Bacillus thuringiensis* endotoxin, wherein the preselected DNA sequence is adjusted to be more efficiently expressed in *Zea mays* than the native *B. thuringiensis* DNA sequence encoding said endotoxin; (ii) identifying a population of transformed cells comprising said preselected DNA sequence; and (iii) regenerating a fertile transgenic plant therefrom, wherein ~~said DNA comprising~~ said preselected DNA sequence is expressed so as to impart insect resistance to said transgenic plant and is heritable.
11. (Previously presented) The process of claim 10, wherein the preselected DNA sequence further comprises a selectable marker gene or a reporter gene.
12. (Previously presented) The process of claim 10 or 11, wherein the fertile transgenic *Zea mays* plant is generated from transformed embryogenic tissue.
13. (Previously presented) The process of claim 12, wherein the cells are derived from immature embryos.
14. (Previously presented) The process of claim 10 or 11, further comprising obtaining transgenic insect resistant progeny plants of subsequent generations from said fertile transgenic plant.
15. (Previously presented) The process of claim 14, further comprising obtaining seed from one of said progeny plants.
16. (Previously presented) The process of claim 10 or 11, wherein the preselected DNA sequence encodes the HD73 endotoxin of *Bacillus thuringiensis*.

17. (Previously presented) The process of claim 10 or 11, wherein the preselected DNA sequence encodes the HD1 endotoxin of *Bacillus thuringiensis*.
18. (Previously presented) The process of claim 10 or 11, wherein the preselected DNA sequence encodes the DH1 endotoxin of *Bacillus thuringiensis*.
19. (Previously presented) The process of claim 10 or 11, wherein the preselected DNA sequence comprises an operably linked promoter.
20. (Previously presented) The process of claim 19, wherein the preselected DNA sequence further comprises a promoter operably linked to said DNA sequence encoding said endotoxin and a promoter operably linked to said selectable marker gene of claim 11.
21. (Previously presented) The process of claim 11, wherein the selectable marker gene confers resistance or tolerance to a compound selected from the group consisting of hygromycin, sethoxydim, haloxyfop, glyphosate, methotrexate, imidazoline, sulfonylurea, triazolopyrimidine, s-triazine, bromoxynil, phosphinothricin, kanamycin, G418, 2,2-dichloropropionic acid and neomycin.
22. (Previously presented) The process of claim 21, wherein the compound is phosphinothricin.
23. (Previously presented) The process of claim 21, wherein the compound is kanamycin.
24. (Previously presented) The process of claim 21, wherein the compound is hygromycin.
25. (Currently amended) The process of claim 10, 11, 16 or 17, wherein the preselected DNA sequence encoding said endotoxin comprises an increased number of maize preferred codons compared to native *Bacillus thuringiensis* endotoxin.
26. (Previously presented) The process of claim 11, wherein the DNA encoding the *Bacillus thuringiensis* endotoxin of claim 10 is fused in frame with said selectable marker or reporter gene.

27. (Previously presented) The process of claim 18, wherein the *Bacillus thuringiensis* endotoxin comprises about the N-terminal 50% of the endotoxin.
28. (Currently amended) The process of claim 10, wherein the preselected DNA sequence further comprises a protease inhibitor.
29. (Currently amended) The process of claim 19, wherein the preselected DNA sequence further comprises the maize Adh1S first intron or the maize *Shrunken-2* first intron positioned between the promoter and the preselected DNA sequence encoding said endotoxin.
30. (Previously presented) The process of claim 19, wherein the preselected DNA sequence further comprises a manopine synthase promoter, a nopaline synthase promoter or an octopine synthase promoter operably linked to said preselected DNA sequence.
31. (Previously presented) The process of claim 19, wherein the promoter is the CaMV 35S or 19S promoter.
32. (Currently amended) A population of plants obtained by breeding the transgenic plants of claim 10 wherein the preselected DNA sequence from said transgenic plant is transmitted by Mendelian inheritance through both male and female parent plants to the population of plants.

COMMENTS

Entry of the instant Amendment is proper under 37 C.F.R. §1.116 because it eliminates claim rejections under 35 U.S.C. §112, second paragraph, and therefore places the case in better condition for appeal. Entry of the Amendment is thus respectfully requested.

The Examiner is invited to contact the undersigned at the telephone number listed below with any questions.

Respectfully submitted,



Robert E. Hanson
Reg. No. 42,628
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.
600 Congress Avenue, Suite 2400
Austin, Texas 78701
(512) 536-3085

Date: November 17, 2004